

REMARKS

Claims 28-46 were pending in the application. Claim 38 has been canceled. Claims 47 and 48 are newly added. Of the claims, Claims 28 and 36 are independent claims. Claims 28-46 are rejected under 35 U.S.C. § 102(e) as being deemed anticipated by Benayoun et al. (U.S. Patent No. 6,704,866). Claims 34 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Benayoun et al. (U.S. Patent No. 6,704,866). The application as argued herein, is believed to overcome the rejection.

Regarding Rejections under 35 U.S.C. 102(e)

Claims 28-46 are rejected under 35 U.S.C. § 102(e) as being deemed anticipated by Benayoun et al. (U.S. Patent No. 6,704,866).

The Applicants' disclosed invention is directed to a data encryption system having a plurality of processors. A packet is received at an ingress port (Fig. 8, 81) of the data encryption system is processed by the processors using the processes shown in Figs. 9a-9d and the processed packet exits the data encryption system through the egress port (Fig. 8, 86). A control process modifies the received packet to include control data that includes a list of processes to be performed on the packet by the plurality of processors in the system. An interconnection including a buffer controller responds to control data in the packet to determine a processor of the plurality of processors dedicated for processing a process in the list of processes and forwards the packet with control data to the determined processor. After processes in the list of processes are complete, the processed packet is forwarded without the control data from an output.

The cited reference Benayoun is directed to a process for transporting data from a transmitting terminal to a receiving terminal through a plurality of nodes. Referring to Fig. 1, the packet is forwarded from DTE1 through access nodes 1, 6; network nodes 3, 4; and protocol nodes 2, 5 to DTE2. The control protocol defines the function of each node involved in the communication (access, protocol, network) between the transmitting DTE and the receiving DTE. For example, a network node may only switch or route, it has no access to the protocol

header or the data. Only the access node (node 1) performs encryption. (*See* Col. 9, lines 5-61.) The control protocol is used to setup nodes, check for error, proceed to recovery and reset. The control protocol is added by an access node which establishes a path through other nodes to the other access node.

Benayoun does not teach or suggest at least the Applicants' claimed "a buffer controller which responds to control data in the packet to determine a processor of the plurality of processors dedicated for processing a process in the list of processes and forwards the packet to the determined processor" as claimed in Claim 28. In contrast, in the network described by Benayoun, the packet is forwarded from node to node along a pre-defined path from DTE to DTE, the forwarding of the packet is not dependent on a process in the list of processes in control data in a packet. The packet is forwarded to every node in the pre-defined path in contrast to the Applicants' data encryption system in which a packet is forwarded for processing to a processor based on a process to be performed on the packet identified in the control data included in the packet. In Benayoun's system, the packet is forwarded from a node to a subsequent node.

Furthermore, Benayoun does not teach or suggest the Applicants' claimed "an output from which the processed packet is forwarded without the control data upon completion of the processes in the list of processes" as claimed in Claim 28. In contrast, in the system for transporting data from a transmitting terminal to a receiving terminal through a plurality of nodes, a "processed" packet is not forwarded to the receiving terminal upon completion of the processes in the list of processes. In contrast, node 6 (Fig. 6) in the pre-defined path from DTE1 to DTE2 unencrypts and transforms the packet into clear data (i.e., as transmitted by DTE1 to node 1 (*See* Fig. 1)) for forwarding to the receiving terminal (DTE2).

In the Applicants' system, a processor is only provided with the packet if it is required to perform a modification to the packet in contrast to Benayoun's system in which each node receives the packet in any case, even though no modification of the packet is performed by the node. Furthermore, in the Applicants' system after a selected processor has performed a process on the packet, the resulting processed packet is returned to the buffer controller and not to another processor. (*See* Page 9, lines 5-21, Claim 48.)

Claims 29-36 are dependent on Claim 28 and thus include this limitation over the prior art. Independent Claim 37 and claims dependent on claim 37, include like limitations distinguishing the cited art.

As such the § 102 rejection of Claims 28-33, 35-43 and 45-46 is believed to be overcome.

Regarding Rejections to the claims under 35 U.S.C. 103(a)

Claims 34 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Benayoun et al. (U.S. Patent No. 6,704,866). Claim 34 is dependent on Claim 28 and Claim 44 is dependent on Claim 37 and thus include the limitations previously discussed over the prior art.

Furthermore, Benayoun does not even discuss IP protocol processing. Benayoun merely discusses adding a new protocol layer (DML) between the ATM protocol and the IP protocol in a data frame (the DML layer) which defines the function of each node between a transmitting DTE and a receiving DTE. The discussion of the addition of a new protocol layer to a data frame that is forwarded from node to node in a network does not teach or suggest the Applicants' disclosed IPSEC processing which includes IP Header Manipulation, DES Encryption and HMAC96-MD5 Authentication. (See Fig. 5, processes (3) (4) and (5) and Page 12, line 14 – Page 13, line 25.)

As such the § 103 rejection of Claims 34 and 44 is believed to be overcome.

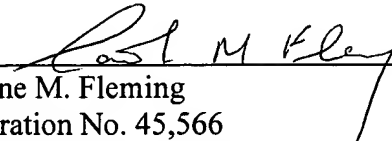
Accordingly, the present invention as now claimed is not believed to be anticipated by or made obvious from the cited art or any of the prior art. Removal of the rejections of claims 28-46 under 35 U.S.C. 102(e) and Claims 34 and 44 under 35 U.S.C. 103(a) and acceptance of Claims 28-37 and 39-48 is respectfully requested.

CONCLUSION

In view of the above amendments and remarks, it is believed that all claims are in condition for allowance, and it is respectfully requested that the application be passed to issue. If the Examiner feels that a telephone conference would expedite prosecution of this case, the Examiner is invited to call the undersigned.

Respectfully submitted,

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